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UTILITY	Attorney Docket No. TGR-102US			TGR-102US
PATENT APPLICATION TRANSMITTAL		ventor	or Calvin R. Krusen	
		System And Method For Cave Continuously Varying Contin		lethod For Cavity Ring-Down Spec Varying Continuous Wave Excitation

troscopy Using (Only for new nonprovisional applications under 37 C.F.R. 1.53(b)) Express Mail Label No. EV 325-927-505 US Commissioner for Patents APPLICATION ELEMENTS Mail Stop Patent Application ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 CD-ROM or CD-R in duplicate, large table or 1. 🛛 Fee Transmittal Form (e.g., PTO/SB/17) Computer Program (Appendix) (Submit an original and a duplicate for fee processing 8. Nucleotide and/or Amino Acid Sequence Submission 2. 🔯 Applicant claims small entity status. (if applicable, all necessary) See 37 CFR 1.27. a. Computer Readable Form (CRF) з. 🔯 Specification [Total Pages 17 b. Specification Sequence Listing on: (preferred arrangement set forth below ☐ CD-ROM or CD-R (2 copies); or - Descriptive title of the Invention paper - Cross References to Related Applications - Statement Regarding Fed sponsored R & D c. 

Statements verifying identity of above copies Reference to sequence listing, a table, or a computer program listing appendix ACCOMPANYING APPLICATIONS PARTS - Background of the Invention 9. Assignment Papers (cover sheet & document(s)) - Brief Summary of the Invention - Brief Description of the Drawings ( if filed) 10. 37 C.F.R.§3.73(b) Statement □ Power of - Detailed Description (when there is an assignee) Attorney - Claim(s) - Abstract of the Disclosure 11. English Translation Document (if applicable) 8 4. 🛛 Drawing(s) (35 U.S.C.113) [Total Sheets ] 12. Information Disclosure Statement (IDS)/PTO-1449 Citations 5. Oath or Declaration [Total Pages 2 13. Preliminary Amendment a. Newly executed (original or copy) b. 
Copy from a prior application (37 CFR 1.63 (d)) 14. Return Receipt Postcard (MPEP 503) (for a continuation/divisional with Box 18 completed) (Should be specifically itemized) □ DELETION OF INVENTOR(S) 15. 🔲 Certified Copy of Priority Document(s) Signed statement attached deleting inventor(s) (if foreign priority is claimed) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). Nonpublication Request under 35 U.S.C. 122 c. Unexecuted Declaration (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. Other: Check 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: □ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_ · □ Continuation Prior application information Examiner Group / Art Unit: \_ For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS ☑ Insert Customer Number 23122 OR ☐ Correspondence address below Name Address Zip Code City State Country Telephone Fax Name (Print/Type) 41,738 Jacques Etkowicz Registration No. (Attorney/Agent) Date September 22, 2003 Signature

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL for FY 2003 Effective 01/01/2003. Patent fees are subject to annual revision.		Complete if Kn wn						
		Application Number		To	To Be Assigned			
		Filing Date		Н	Herewith			
		First Named Inventor		. C	Calvin R. Krusen			
Applicant claims small entity status. See 37 CFR 1.27		Exam	Examiner Name					
		Art Unit						
TOTAL AMOU	NT OF PAYMENT	(\$) 538	Attorney Docket No.		TO	TGR-102US		
METHO	DD OF PAYMENT (ci	neck all that apply)	FEE CALCULATION (continued)					
☐ Check ☐ Credit Card ☐ Money ☐ Other ☐ None Order			3. ADDITIONAL FEES Large Entity Small Entity			_		
Deposit Account:		Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Deposit			1051	130	2051	65	Surcharge - late filing fee or oath	
Account Number	Ratner Prestia		1052	50	2052	25	Surcharge - late provisional filing fee or	

Deposit Account 1053 1053 Non-English specification 130 130 18-0350 1812 2,520 1812 2,520 For filing a request for ex parte reexamination The Commissioner is authorized to: (check all that apply) Requesting publication of SIR prior to Charge fee(s) indicated below 1804 920\* 1804 920\* Ø Credit any overpayments Examiner action 1805 1,840\* Requesting publication of SIR after 1805 1,840 Charge any additional fee(s) during the pendency of this application Examiner action Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. 1251 110 2251 55 Extension for reply within first month Extension for reply within second month 1252 410 2252 205 FEE CALCULATION Extension for reply within third month 1253 930 2253 465 BASIC FILING FEE Large Entity **Small Entity** 1254 1,450 2254 725 Extension for reply within fourth month **Fee Description** Fee Fee Extension for reply within fifth month 1255 1,970 2255 985 Code (\$) Fee Paid Code (\$) 1401 320 2401 160 Notice of Appeal 375 1001 750 2001 375 Utility filing fee Design filing fee 2002 165 1002 330 2402 Filing a brief in support of an appeal 1402 320 160 2003 260 Plant filing fee 1003 520 1403 280 2403 Request for oral hearing 140 1004 750 2004 375 Reissue filing fee 1451 1,510 1451 1,510 Petition to institute a public use proceeding 1005 160 2005 80 Provisional filling fee 1452 110 2452 55 Petition to revive - unavoidable (\$) 375 SUBTOTAL (1) Petition to revive - unintentional 1453 1,300 2453 650 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Utility issue fee (or reissue) 2501 1501 1.300 650 Extra Fee from Fee Paid Claims 1502 470 2502 235 Design issue fee below -20\*\* Х 29 81 Total Claims 9 9 1503 630 2503 315 Plant issue fee Independent -3\*\* х 42 42 130 Claims 1460 1460 130 Petitions to the Commissioner Multiple O X 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) Dependent Submission of Information Disclosure Stmt Large Entity **Small Entity** 1806 180 1806 180 Fee Fee Fee Fee Recording each patent assignment per Fee Description 40.00 8021 40 8021 40 Code (\$) Code (\$) property (times number of properties) 1202 18 2202 9 Claims in excess of 20 750 2809 375 Filing a submission after final rejection (37 1809 CFR § 1.129(a)) Independent claims in excess of 3 1201 84 2201 42 2810 375 For each additional invention to be 1810 750 Multiple dependent claim, if not paid 1203 280 2203 140 examined (37 CFR § 1.129(b)) \* Reissue independent claims over 1204 84 2204 42 original patent 2801 Request for Continued Examination (RCE) 1801 750 375 \*\* Reissue claims in excess of 20 and 2205 9 Request for expedited examination of a design 1205 18 1802 900 1802 900 over original patent SUBTOTAL (2) (\$) 123 Other fee (specify) \*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)40"or number previously paid, if greater; For Reissues, see above

SUBMITTED BY Complete (if applicable)						$\equiv$
Name (Print/Type)	Jacques Etkowicz	Registration No. Attorney/Agent)	41,738	Telephone	610-407-0700	
Signature		11/2/2		Date	9/4/03	

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CERTIFICATE OF MAI Applicant(s): Calvin R. Kr	Docket No. TGR-102US		
Serial No.	Filing Date	Examiner	Group Art Unit
To Be Assigned	Herewith		
Invention: SYSTEM AND	METHOD FOR CAVITY RIN	IG-DOWN SPECTROSC	OPY USING CONTINUOUSLY

Invention: SYSTEM AND METHOD FOR CAVITY RING-DOWN SPECTROSCOPY USING CONTINUOUSLY VARYING CONTINUOUS WAVE EXCITATION

I hereby certify that the following correspondence:

Utility Transmittal; Fee Transmittal in duplicate; Specification (17 pgs.); Drawings (8 sheets); Executed Declaration/POA (2 pgs.); Assignment (2 pgs); Assignment Recordation Cover Sheet (1 pg); IDS (2 pgs.); 1449 (2 pgs); Copies of 2 cited references; Check; Postcard

(Identify type of correspondence)

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